



Original Article

Climate Change in Beed district: A Geographical Analysis

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Abstract:

This research paper is Studying climate change in the Beed district helps to understand what causes the changes, Prepares us for any natural hazard or extreme changes that can be predicted and helps to identify both man-made and natural causes for climate change also helps to understand how climate change has an impact on human health and the environment.

Keywords: Beed district, Climate Change

Introduction: -

This research paper throws light on Climate of the Beed district; Physiographic, geology, drainage, climate soil and natural vegetation have been included in this research paper. To a certain extent, historical background also play a very important role in changing the face of a district and for future oriented plans for the various kind of development in the Beed district under study may be implemented. In view of this, it is most essential to give an account of each background in order to make clear overall picture of the district to interpret various aspects of the Beed district. No area on the planet has remained unaffected by climate change. The climate of the planet has changed tremendously over the last few decades, mostly due to pollution, greenhouse gases and depletion of the ozone layer that protects the earth. Global warming is one of the main factors of climate change, leading to excessive flooding, forest fires and rise in global temperatures. some main features that work like early warning signs such as heat waves, periods of unusually warm weather, sea level rising, coastal flooding, ocean warming, and melting of glaciers.

Climate Of Beed District: -

The term climate is a geographical term connoting a spatial distribution of the average atmospheric conditions near the surface of the earth. Average conditions of wind, temperature, pressure rainfall is known as climate. Climate is the principal aspect of the physical environment influencing the economic activities of man. It almost determines the land use and crop patterns of the particular region. Unquestionably, it has a considerable influence on the health of the people. As a matter of fact, climate has a great bearing upon the flora and fauna of a region, which in turn affects the soil condition of a particular region. Apart from this, it influences transportation and communication system and also the settlement pattern. The climate of this district is on the whole; dry, except, in the south west monsoon season. The climatic condition of the Beed district is divided into four seasons. The cold season from December to February is followed by the hot season from March to May. The period from June to September is the South west monsoon season i.e. rainy season while October and November constitute the post monsoon season in the region under study.

Temperature: -

Among the various elements of climate, the temperature is the most important, as it has the greatest impact upon the



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agriculture activity over the Earth. The temperature varies from place to place due to physical constraints as well as geographical location in terms of Latitudes. Beed district belongs to the tropical area which receives the maximum amount of temperature throughout the year.

The only meteorological observation in the district which is at Beed began functioning recently. The description of the temperature and other meteorological conditions in the district which follows is based on the records at the meteorological observatories in the neighboring districts and the major records for Beed.

Physiography:

Physiographic is one of the dominate parameter of physical environment and its impact on patterns and density of agriculture is immense. The study of the influence of environment upon the nature and the distribution of crop and livestock is of prime importance in agricultural geography. Beed is situated in the Deccan black basalt stone, ranges of Balaghat that constitutes main rang from Ahmednagar in the west, to the border of district Beed in the East.[fig 2.3]

Geology

The Beed district is occupied by Basalt formations belonging to Deccan traps of Cretaceous –Eocene age. The basalt formations belong to the type called “Plateau Basalts” and uniform in composition corresponding to that of Dolerite or Basalt with an average specific gravity of 2.9. They are dark grey to dark greenish grey in color. [fig 2.4]

Drainage:

Water is an essential for the development of agriculture. Adequate water supply is necessary for the choosing crops. Hence, it is essential to study drainage pattern of the district in detail. Most of the river are flowing through the Beed district are seasonal. They are having water in rainy season, and some time in winter season. Most of the rivers become dry in summer season; hence, they are not useful for irrigation. Due to the seasonal nature of the rivers, the agricultural sector is greatly affected. The district is drained by Godavari River and its tributaries. The Godavari together with its tributaries the Lindi, the Amrita, the Sindphana, the Saraswati, the Gomati and the Wan, while there are other tributories, the like Manjra, the Bendsura etc. [fig 2.5]

Soils:

Soil constitutes the physical basis of an agricultural enterprise and plays a very important role in the agricultural economy of a region. Differences in soil texture, drainage and fertility are of major importance in explaining contrasts in agriculture from one region of to another. Unlike climate, soils should not be regarded as a part of the natural endowment of an area. In fact, it is agriculture that modifies soils, except certain virgin soils which can retain their original characteristics. On the whole, soils constitute the physical base, for any agricultural enterprise. Farming is a business and good soil is part of the farmer's stock in trades. [fig 2.7]

Natural Vegetation:

Vegetation of some sort of the other is the natural covering of the land surface of the earth. Even the scaled deserts have their vegetation, though it may be scanty and in conspicuous. Fertility and ameliorate the extremes of climate forest play a significant role in the prevention and control of soil erosion by water and wind. These forests have thorny shrubs with barren and rocks patches scattered all over the region. On the whole, the forests in the district are of an inferior type. Apta, khair, babhul, bor, bel, hiwar, kawath, sisam, these trees belongs to dry, thorny forests are found all over the region. Dhawda, chandan, palas, pimpal, wad, chinch, nimb, mango, these trees of dry deciduous types forest are also found in study area woods obtained from the forest is mostly used for making agricultural implements etc.. Dry deciduous forest is found in the entire study region. (Fig. 2.8)

The forests of the Beed district can be classified into the following three groups. A) Scrub forest B) Tree forest C) Grasses.

A)Scrub forests:-

The pressure of the increasing population and the ever -increasing demand for land for tillage, the forest areas have receded to distance hilly tracts with poor and shallow soil.

Actually, majority of the forest blocks in this district carry scrub by growth of bharati (*Gymnosporia montma*) Dhawai (*Wood fordia floribunda*) dhal, ghela, ghaneri, Karonda, mador Rui,Nirgudi, paristak, tarwad, tarota, Chindh and thick grass due to which most of these blocks have been declared as remains of kurans and are sold either on cutting or grazing terms.

B)Tree forests :-

The types of forest occurs only in cool sheltered pockets having northern and eastern aspects, these forests are of mixed - miscellaneous type and consists mostly of salia, moina, temru, Kandal, Khari, Bahawa, Palas, bhilwa, Lokhandi, Ghat-bor, apta, bhutkes, with scattered dhavad, Awala and Chandan at some places.

C)Grasses :-

The main grasses found in the various forest blocks of the district are boni, kusali, panaya, rosha, sheda, kunda, gondal, chirka and moruel.

Conclusion:

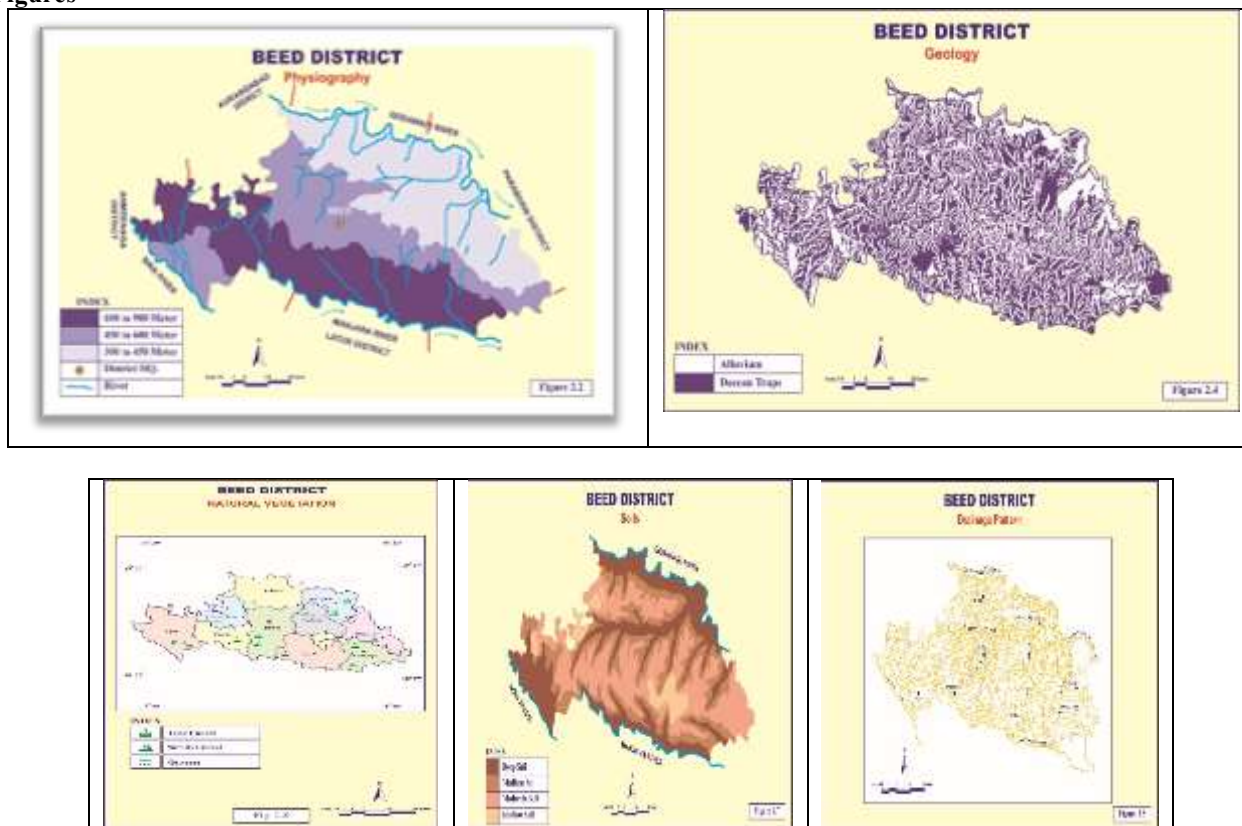
In the physiographic lowland region is found at the northern part of the district, it is part of the Godavari valley the northern lawland has a general elecation from 550 metres in the west to a little under 400 metres in the east, interspread

with a number of residual hills of summits over 600 meters. Gonaba hill, the chitora hill and Naryanagad hilly region in lawland region are not suitable for agricultural activities due to unfavourable physical condition. The Traps have been distinguished into the vesicular and non-vesicular types. The nonvascular types are hard, compact and medium to fine grained in texture. Sometimes they break with conchoidal fracture. The vesicular types are soft and tend to break with more ease. Drainage is one of the most important components of physical environment which affects agriculture directly and indirectly. All the streams of the district drain into one of the three principal rivers of the Godavari, the Manjara and the Sina which flow along the northern, southern and the south-eastern boundaries of the Beed district Godavari river has changed agricultural structure of north Georai and Manjalgon tahsil. River Lendi, Amrita, Sindphana, Saraswati, Lendi Gunwati and Wan the tributaries of Godavari which have played an important role in the agricultural development of the study region of Beed district.

The climate of this district is dry, except, in the south-west monsoon season. May is the hottest month with the mean daily maximum temperature may be as high as 46°C with the advance of south-west monsoon into the dist. By about the second week of June the temperature falls appreciably and weather is pleasant throughout the south-west monsoon withdrawn and the day temperature increase slightly and a secondary maximum is reached on 6th October up to 32°C, thereafter, the temperature begins to decrease gradually. Temperature is quite favorable for the growth of various crops in the study region. Crops growth is determined to a considerable extent by the amount of nutrients out the district. Deep black soils covers about 12.76 percent portion soils in the soils. The main factor that has influenced the development of soils in Beed district is the undulating and hilly topography. The soils of varying are to be found through covers 65 percent area, coarse and shallow soils covers 22.74 percent portion of the district. Medium deep soil is found in every tahsils particularly on the banks of various streams medium and deep black. Soils are found in Georai, Ambejogai and Manjalgaon tahsils medium and deep black soils are favorable for cotton sugarcane and other crops. The ph. Value of medium soils varies from 8.2 to 8.7 and total soluble salts from 0.2 to 0.3 percent. The contents of calcium carbonate and those of organic matter vary widely from 3 to 20 percent and from 0.48 to 2.16 percent in the medium black soil in the study region.

Deep black soils are found in the river valleys of Manjara, sina, bendsura, Godavari, Chausala, Rena, Kaij, Amrita, Wan, Saraswati etc. There is heavy concentration of agricultural activities in medium and deep black soils Natural vegetation prevents soil erosion; regulate the flow of rivers and reduce the floods, check the spread of deserts and to soil. the forest of beed of district is not economically important. The Beed district has limited area under forest Every taluka has forest cover except Georai but the proportion of cover varies from one taluka to another taluka.

Figures





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